

ABSTRACT OF THE DISCLOSURE

[0052] A rotary cutting apparatus comprises a rotary shaft assembly having an axis and adapted to hold a cutting tool coaxial with the axis and, a feed mechanism for moving the cutting tool held by the rotary shaft assembly along the axis of the rotary shaft assembly. The rotary shaft assembly comprises a proximal rotary shaft, an intermediate, a distal rotary shaft which are successively telescopically connected, and a cylindrical housing rotatably holding the distal rotary shaft and movable along the axis together with the distal rotary shaft. The feed mechanism comprises a first rack mounted on the cylindrical housing and extending in parallel with the axis of the rotary shaft assembly, a second rack securely mounted on the body in parallel with the first rack; and, a pinion positioned between and engaged with the first and second racks.